EARLY ISLAMIC BOOKBINDINGS AND THEIR COPTIC RELATIONS

BY THEODORE C. PETERSEN

While the belief widely prevails that Islamic bookbinding owed much of its early artistic inspiration and technical skill to Coptic, Sasanian, and Hellenistic sources, a full demonstration of such indebtedness could not be undertaken so long as few or no bookbindings of the early days of Islamic history were known to have survived. Now, thanks to a fortunate recent discovery and the patient and painstaking study of the findings by Georges Marçais and Louis Poinssot, the long-delayed demonstration has been attempted and is presented in the first fascicle of an imposing work, *Objets Kairouanais, IX^e au XIII^e Siècle,* published by the "Direction des Antiquités et Arts," Tunis, 1948.

This first fascicle (364 pages of text with 67 drawings by L. Gaillard and P. Carrère, and 54 plates) deals exclusively with "Reliures de Kairouan." Under 156 numbers, some 179 ancient bookbindings and remnants of bookbindings are minutely described. While none of these bindings dates from the earliest period of Islamic history, 58 of them are assigned to the ninth century, 19 to the tenth, 71 to the eleventh, and 31 to the twelfth and thirteenth centuries. All the 77 bindings dating from the ninth and tenth centuries and 58 or 59 of those dating from the eleventh are of the "format à l'italienne" (wider than high). The smallest of them (No. 10) measures 105 x 52 mm. The two largest (Nos. 22 and 23) measure 368 x 274 mm. and 370 x 270 mm., respectively. Twelve or 13 of the bindings assigned to the eleventh century and all the bindings assigned to the twelfth and thirteenth centuries are of the "format à la française" (higher than wide). The smallest of the latter group (No. 113) measures about 100 x 122 mm., the largest (No. 116) measures 344 x 405 mm.

The greater portion of these bindings, including all those of the ninth and tenth centuries, was discovered a few years ago by L. Poinssot in one of the storerooms flanking the north side of the court of the Grand Mosque of Kairouan. The room had been used for many years as a pigeon house and its floor was covered high with bird manure, but some forty or more years earlier someone had deposited here the discarded debris of the library of the Grand Mosque. This debris, regarded, most likely, as too venerable to be destroyed, consisted of some badly damaged leaves from early manuscripts of the Koran and a large number of torn-off old book covers, most of them broken and worm-eaten. When found, these book covers lay scattered pell-mell over the floor and were partly covered with manure. As their age and character were immediately recognized, they were taken to the Museum of Bardo, where they were carefully cleaned and prepared for permanent preservation.

Since these bindings were no longer attached to the books for which they were made, they could reveal little about the methods by which their several quires of leaves had been sewn into gathered books (*figs. 1–4*) and about the methods by which the gathered books had been attached to the covers.[1] But

[1] The lower cover of the ninth-century binding, No. 5, still holds the remnants of a quire of parchment leaves attached to it. The sewing of this quire was done in three stitches. The sewing holes of the longer middle stitch lie flush with the two holes found in the hinging edge of the wooden board, i.e., the holes into which the sewing threads of the book were laced in commencing and terminating the sewing op-

they reveal that most of the oldest book covers were made of wooden boards which were covered with brown leather showing elaborate patterns of interlaced decoration done in blind-tooling and stamping.[2]

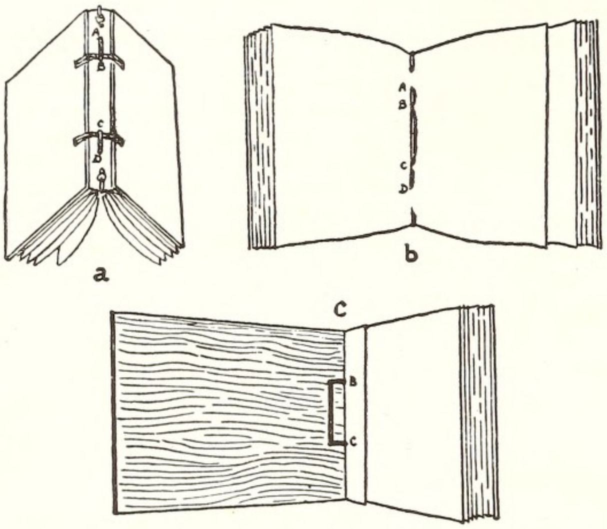

FIG. 1—SEWING OF KAIROUAN BINDING NO. 5 (97 x 142 MM.), A CODEX SEWN IN SINGLE QUIRE

(After Gaillard.)

The inner sides of the boards had in most instances been lined with parchment sheets. Some of the latter were recognizable as being the unwritten first leaves of the first quires, or last leaves of the last quires, of the manuscripts bound within those boards. The gluing of these end leaves onto the inner faces of the boards was possibly intended to give added strength to the hinging of the covers. Another fact observable in these bindings was that most of them (perhaps all those having wooden boards) had been provided with clasps consisting of looped thongs and staples, i.e., of loops of thong fastened in the edge of the lower (left) cover and being just long enough to be clasped tightly to the head of a peg or staple driven into the rim of the upper (right) cover.[3]

A good number of the bindings dating from the twelfth and thirteenth centuries, of the "format à la française," show that they were provided with pentagonal flaps extending from the fore edge of the lower left covers and being wide enough, after having been folded over the fore edge of the book, to be tucked under the upper covers down to half their widths, similar to the flaps still used in modern Islamic bindings.

Most of the older Kairouan bindings, however (chiefly those of the "format à l'italienne"), were provided with what in their present broken condition appear to be narrow leather flaps attached to the head, tail, and fore edges of the lower covers. While most of these flaps are partly or wholly broken off and lost, those which remain are of a width no greater than needed to cover the fore edges of the respective books for which they were made. Only in three instances is the leather of these flaps seen to be of single thickness,[4] while in all other instances it is of double thick-

---

eration. The hinging edges of a smaller number of the Kairouan boards lack those lacing holes, thus indicating that they were fastened to their gathered books not by lacing but only by means of glued strips of cloth, i.e., by a technique at variance with the general Coptic practice. That the latter practice of gluing books into "cased covers" was not unknown in Coptic Egypt, is shown, however, by such early evidence as the two detached wooden covers (Beatty early book covers I and II) with bone or ivory inlay, from Egypt, probably of the fourth century A.D. which had been hinged to their manuscript contents only with glued strips of linen and which came to the Chester Beatty Library together with the famous group of fourth-century Biblical Papyri, discovered in 1931.

[2] Four of these boards have been identified as being of Aleppo pine, four others of fig, three of white poplar, one each of black poplar, laurel, and tamarisk.

[3] Metal staples were used in 25 of the Kairouan bindings, the numbers of staples used in any single binding varying from two to six. In two bindings the staples are of silver, in nine, of bronze, in the others, of iron.

[4] In bindings 104 A and 106 A and D (not Nos. 116 A and D, as misprinted on p. 17, note 1).

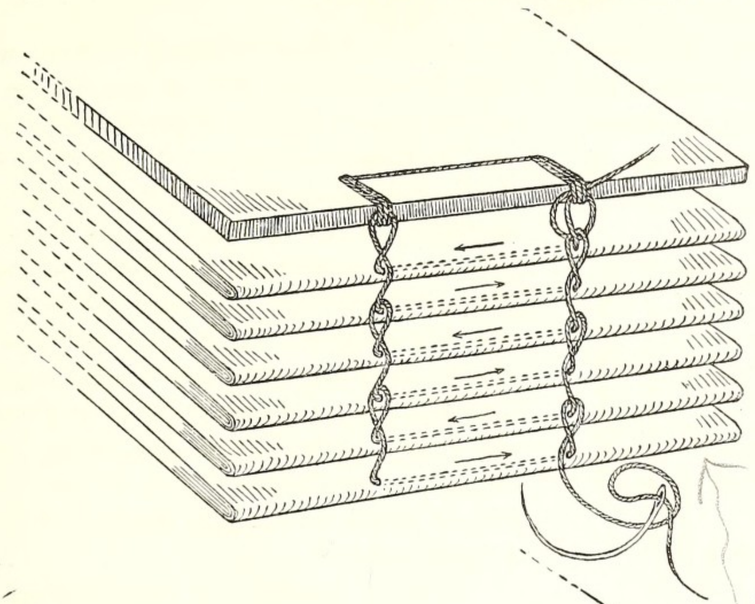

FIG. 2—RECONSTRUCTED SEWING OF KAIROUAN BINDING NO. 5 AFTER MARÇAIS' DESCRIPTION AS A MULTIPLE-QUIRE CODEX SEWN WITH THREE STITCHES

As the thread at the outermost sewing holes was not hinged to the covers, the drawing omits the usual interquire, chain-stitch linking at these two sewing holes. One should expect the codex to be sewn with four chain-stitch linkings, even though the covers were attached only to the second and third of the chain-stitch bands.

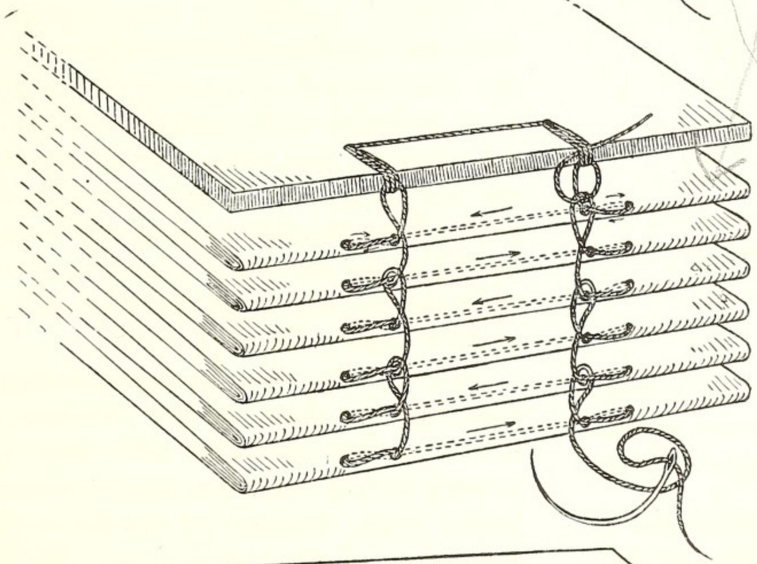

FIG. 1—SEWING OF THE MAGHREB PARCHMENT *Koran* MANUSCRIPT W 556 (146 x 160 MM.), TWELFTH TO THIRTEENTH CENTURY. BALTIMORE, WALTERS ART GALLERY

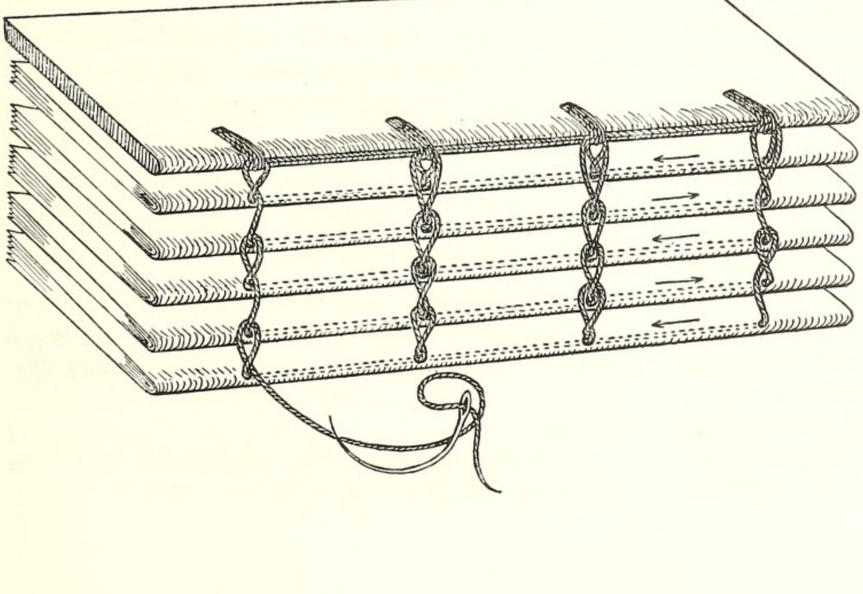

FIG. 4—SEWING OF COPTIC *Lectionary,* MS. MORGAN NO. 634 (320 x 270 MM.), NINTH CENTURY

ness, the leather having been folded over against itself, flesh side to flesh side, and then tightly glued together so as to make a stiff and solid flange. In many instances both sides of this flange are seen to be ornamented, gener-

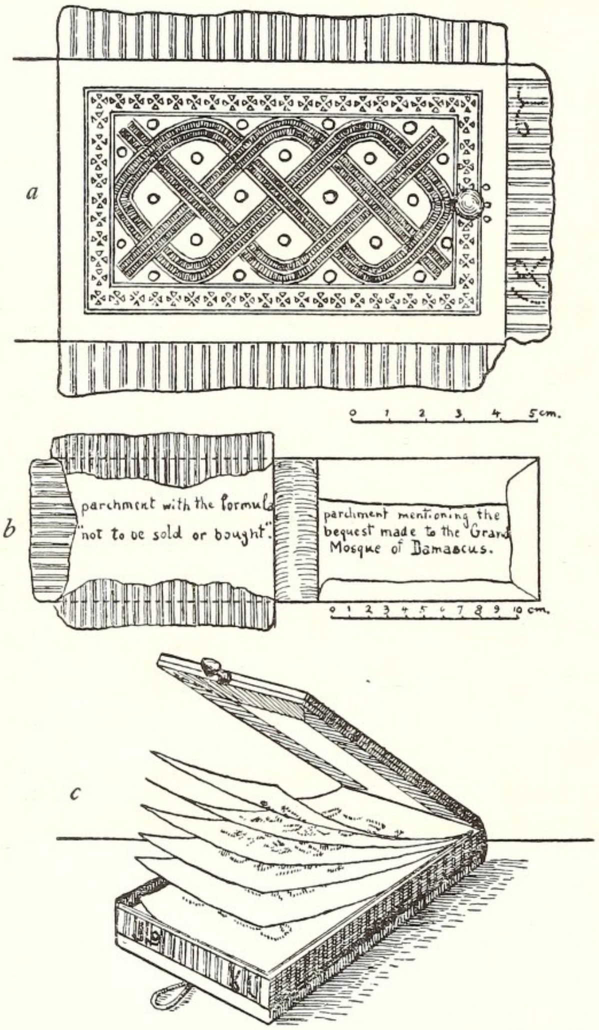

FIG. 5—BINDING OF *Koran* MS. MAṢĀḤIF NO. 188. CAIRO, NATIONAL LIBRARY

a. Decoration on lower cover; b. inner faces of the detached covers; c. reconstruction of a boxed binding.

ally with fillets, the ornamenting having been done before the flange was folded and glued. Three of the bindings [5] are cited by the authors as offering sufficient proof to support the statement that these fore-edge extensions were attached to the lower covers, not as three separate flanges but as one continuous length of leather which was glued at right angles, i.e., in an erect position upon the inside margins or "squares" of the three outer edges of the covers—the attaching being done by the lower edge of the leather, which had been bent sideways. This piece of leather, thus fastened vertically upon the lower left book cover, would constitute three upright sides of a rigid box, the fourth side being formed by the flexible

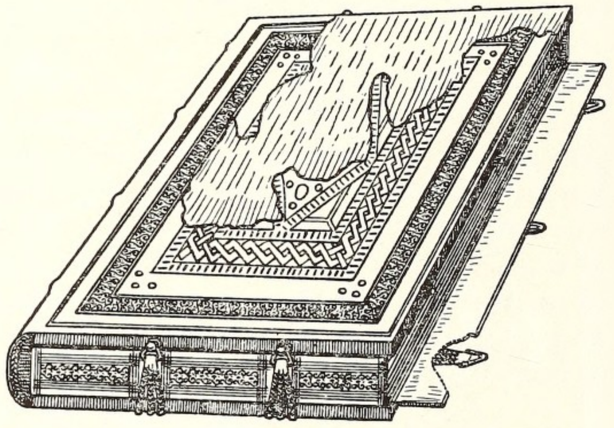

FIG. 6—RECONSTRUCTION OF IBSCHER'S COPTIC BINDING (CA. 440 X 330 MM.), EIGHTH TO TENTH CENTURY. OFFENBACH, LEDER-MUSEUM

Only the lower cover (here shown facing upward) is extant and only one of its three flaps, the one of the tail edge of the book, remains in its place.

back of the codex, and the lid of the box being formed by the book's upper cover. Though it might seem that this type of boxed-in binding would not lend itself to easy turning of the pages, the authors state that some 125 of the Kairouan bindings were thus constructed. Since most of the Kairouan evidence for the suggested reconstruction is fragmentary,[6] the authors adduce as confirming evidence the binding of a ninth-century Koran manuscript (Ma-

[5] Bindings Nos. 41, 54, and 94 *bis*.

[6] Binding 54 as pictured in plate 14 (*fig. 14*) shows a flange continuing unbroken around the lower corner of the cover.

ṣaḥif No. 188) of the Cairo Library, described in T. W. Arnold and A. Grohmann, *The Islamic Book,* p. 45 (*fig. 5*) and a Coptic bookbinding (also cited by T. W. Arnold), the property of Hugo Ibscher (*fig. 6*). It is only fair, however, to state that the published descriptions of these two bindings speak of the added leather strips not as the upright sides of a box but as "fore-edge flaps," which conceivably would fold outward when the book was opened and fold up against the fore edge when the book was closed.[7] Where book clasps were provided, the flaps would be held securely in place as soon as the clasps were fastened. The Kairouan bindings 64 and 77, being of this construction, were provided with three clasps, binding No. 94 *bis* with four clasps, binding 94-A with six clasps, and the

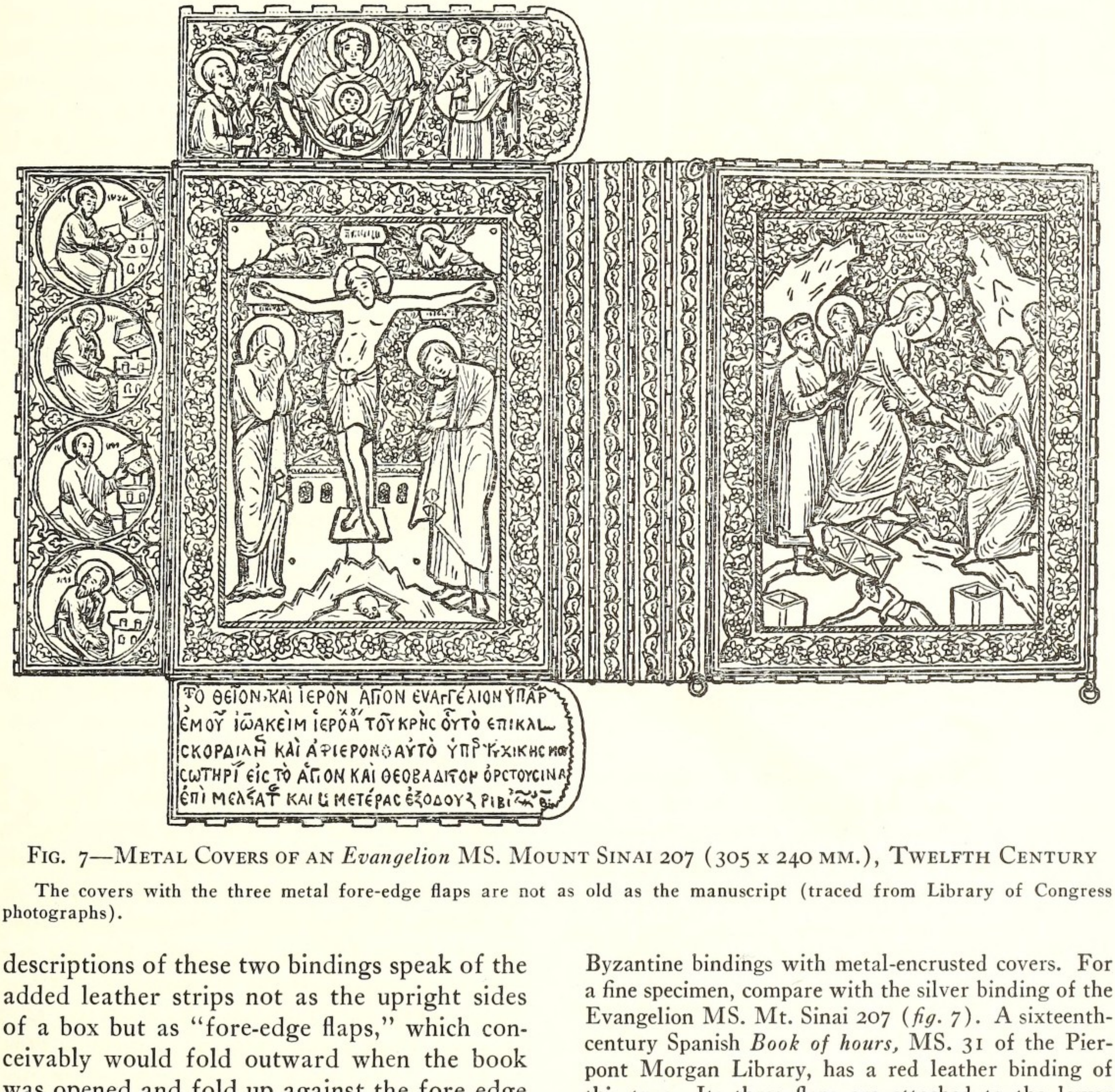

FIG. 7—METAL COVERS OF AN *Evangelion* MS. MOUNT SINAI 207 (305 x 240 MM.), TWELFTH CENTURY

The covers with the three metal fore-edge flaps are not as old as the manuscript (traced from Library of Congress photographs).

[7] Flaps of this latter type were often used in Byzantine bindings with metal-encrusted covers. For a fine specimen, compare with the silver binding of the Evangelion MS. Mt. Sinai 207 (*fig. 7*). A sixteenth-century Spanish *Book of hours,* MS. 31 of the Pierpont Morgan Library, has a red leather binding of this type. Its three flaps are attached to the lower cover and when folded up are held in place by two silver clasps at the fore edge and by one clasp each at the ends.

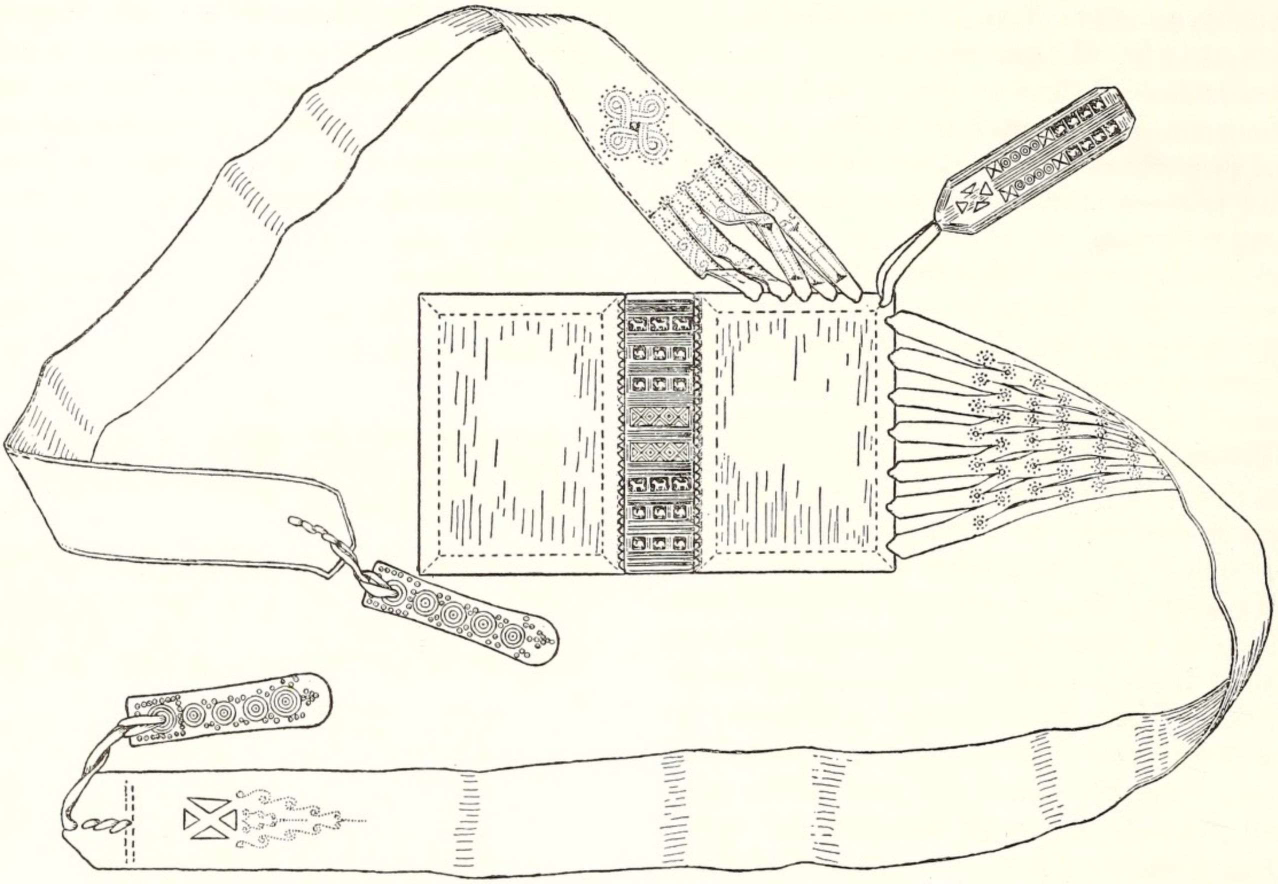

FIG. 8—C. T. LAMACRAFT'S RECONSTRUCTION OF THE BINDING OF MS. CHESTER BEATTY COPTIC B, *Acts and St. John* (120 x 102 MM.), CA. A.D. 600 OR EARLIER

(Drawn from photograph of a facsimile in the Library of the University of Michigan.)

Ibscher Coptic binding, cited above, with seven or nine clasps.[8]

It is clear, however, that the ancient Cairo binding, Maṣāḥif No. 188, and most of the Kairouan bindings resembling it were fastened with only a single clasp across the short fore edge and may, therefore, have deserved the special style of "boxed-in" fore-edge protection seen in so many of the Kairouan bindings.

What will, no doubt, most interest the student of early Islamic bookbinding in the old Kairouan bindings is the richness and variety of the very specialized style of tooled and stamped ornamentation found in their leather coverings. The many different decorative ele-

[8] A more detailed description of the Ibscher binding (since 1931 in the possession of the Leder-Museum in Offenbach) is found in the eighth instalment of Paul Adam's article *Die Griechische Einbandkunst und das früh-christliche Buch,* Archiv für Buchbinderei, vol. 24, Heft 9 (Sept. 1924), p. 81. There is evidence of the use of three flaps, but only the flap attached to the tail is preserved. The clasps in this binding had been seven in number: three along the fore edge, two each at head and tail, and besides these there is evidence at the outer corners of the lower cover of additional triple-platted thongs which, as Ibscher thought, may have been used as corner clasps, but which could also have served for the attaching of book markers such as are seen in the Chester Beatty sixth-century bindings Coptic A and B (*fig. 8*).

ments produced here in blind-tooling—the various types of braid, twisted rope, "chenille" garland, basketweave, ringlet, and flagstone patterns, interlacings, combinations of several of these elements, and a host of intricate panel traceries—all these have been carefully classified, minutely analyzed, described, and pictured in line drawings. Then the large number of varied dies or stamps, some 240 of them, used for enlivening the tooled designs—roundels (concave and convex), annules, squares, lozenges, stars, fleurons, rosettes, heart-shaped dies and others with figures or inscriptions, cut in intaglio—have likewise been classified, analyzed, described, and pictured. And what may at times seem like a labor of supererogation, the origin, diffusion, and uses of some of these decorative elements have been traced through many lands and many centuries down to the Middle Ages. The "torsade" or twisted rope is documented (pp. 290–95) as having been used from the fourth and third millenniums B.C., in Susa, in Lower Mesopotamia, by the Sumerians, the Elamites, and later by the Syrians, Phoenicians, Greeks, Romans, and Gauls. The "tresse à quatre brins" or four-banded braid and various types of interlacing are likewise shown to be not Islamic inventions but heirlooms passed down from very ancient times and cultivated in more recent times by Syrian and Coptic artists. Here a number of patterns found in wall decorations in the Coptic monastery of Bawit are cited and presented in illustrations to show that they are not only similar to, but nearly identical with, those used by the book decorators of Kairouan (*fig. 9*).[9]

The general plan of the Kairouan tooled decorations always consisted of a panel framed by borders. In most of the bindings the panels as well as the borders were filled with "twisted rope" ornament. Within the panel areas the "twisted rope" was often arranged in elaborate, interlaced patterns, including circular, triangular, quadrangular, hexagonal, and octagonal motifs (*figs. 10–19*). Among the exceptions to this more common plan of ornamentation were some of the earliest covers,

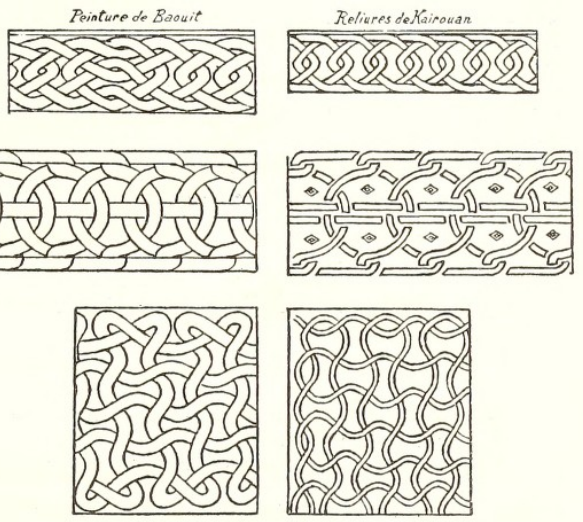

Fig. 9—Decorative Patterns in the Sixth(?)-century Mural Paintings of the Coptic Monastery of Bawit and Similar Patterns in the Ninth-century Bookbindings of Kairouan.

including two with panels that are bare of all ornament, one with a panel containing only two insignificant garlands, five with panels showing no other tooled ornamentation than short eulogies in large Kufic characters. These read: ما شاء on the upper cover (*fig. 10*) and الله on the lower cover—meaning together "what God wills," or بسم on the upper and الله on the lower cover, that is, "in the name of God." There are also fifteen eleventh-century bindings showing within their panels only

[9] Other such parallels could be found in Coptic manuscript illuminations and also in Coptic bookbindings. The border pattern of the Kairouan binding (*fig. 15*) can be matched with the open-work frieze pattern on the upper cover of the Coptic binding, Vienna Inv. No. 34 (*fig. 28*), and the platted-band design of Kairouan binding 98 (*fig. 17*) with the inked ornamentation of the binding of the Beatty MS. Coptic C (*fig. 23*).

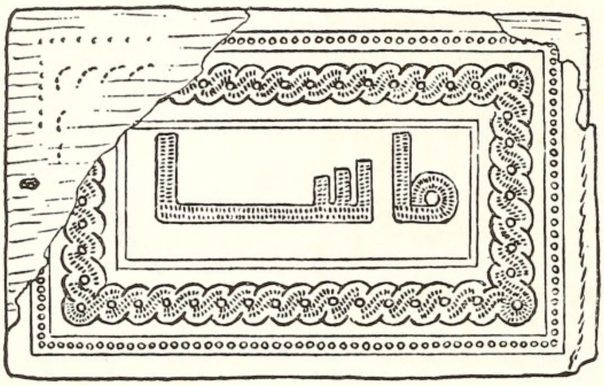

FIG. 10—KAIROUAN BINDING NO. 1a
(83 x 130 MM.), NINTH CENTURY

Only the upper cover with first part of Kufic inscription is shown.

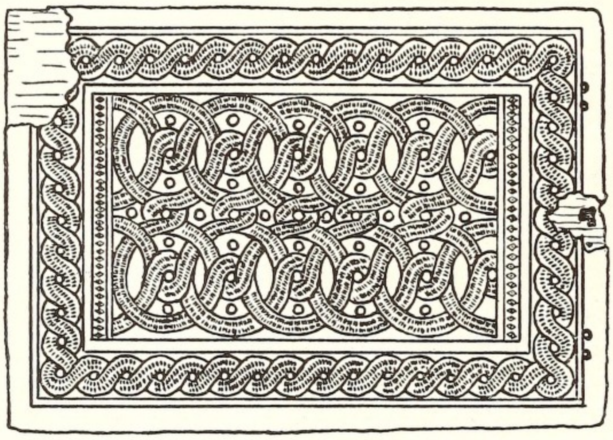

FIG. 11—KAIROUAN BINDING NO. 14
(152 x 217 MM.), NINTH CENTURY

Lower cover only is extant.

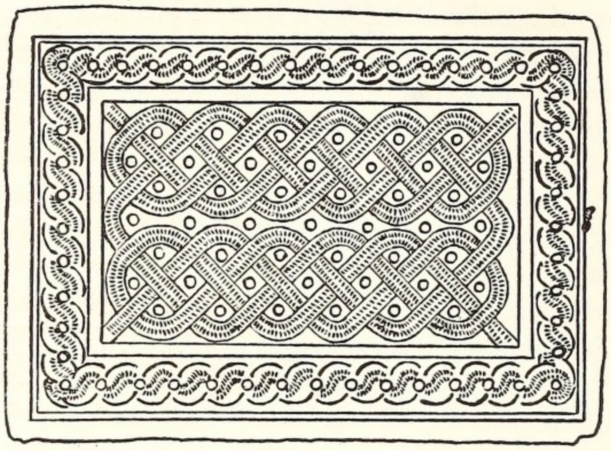

FIG. 12—KAIROUAN BINDING NO. 16
(156 x 219 MM.), NINTH CENTURY

Lower cover only is extant.

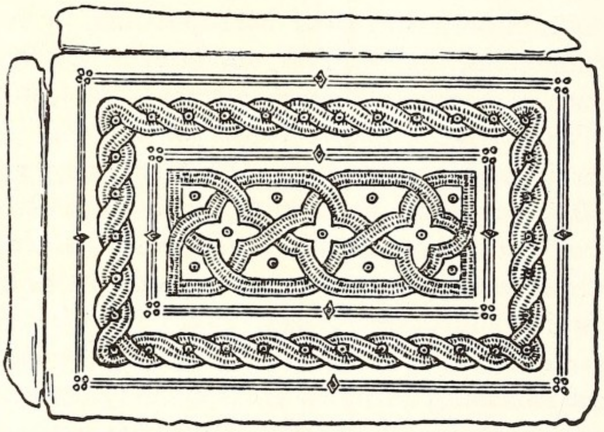

FIG. 13—KAIROUAN BINDING NO. 41
(116 x 174 MM.), NINTH CENTURY

Lower cover only is extant.

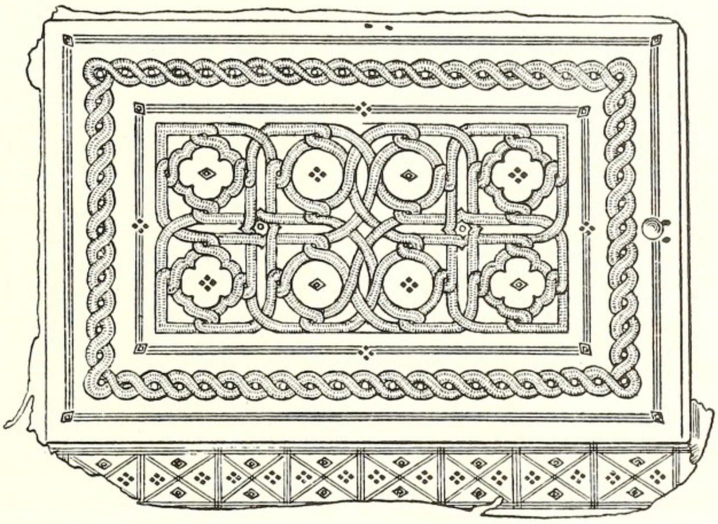

FIG. 14—KAIROUAN BINDING NO. 54 (157 x 236 MM.), NINTH CENTURY

Lower cover only is extant.

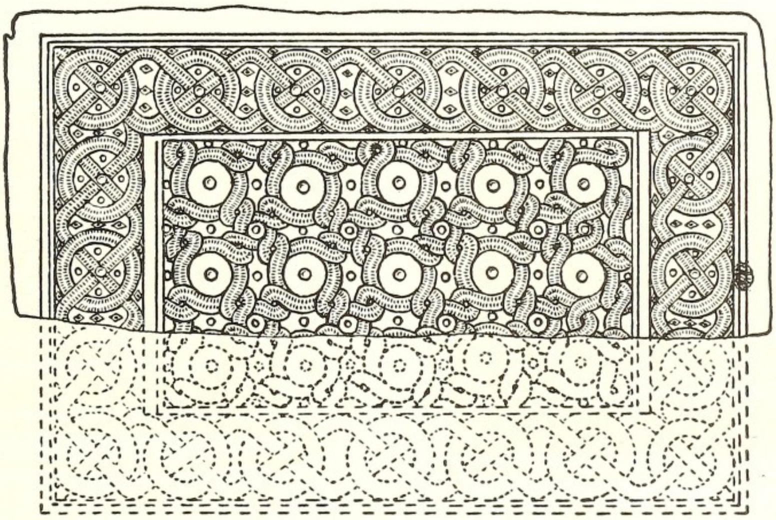

FIG. 15—KAIROUAN BINDING NO. 28 (ORIGINALLY CA. 190 x 276 MM.), NINTH CENTURY

Lower cover only is extant.

The round stamps of this binding show traces of gilding. It is the only instance of the use of gilding found in all of the Kairouan bindings.

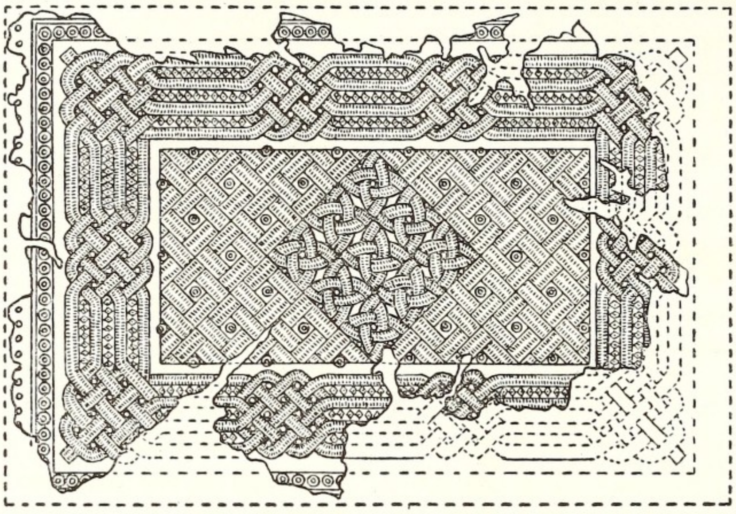

FIG. 16—KAIROUAN BINDING NO. 72 (ORIGINALLY CA. 215 x 300 MM.), TENTH CENTURY

Upper cover only is extant.

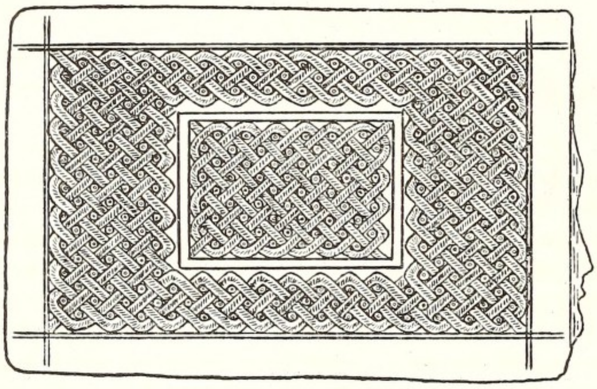

FIG. 17—KAIROUAN BINDING NO. 98 (113 x 176 MM.), ELEVENTH CENTURY

Upper cover only is extant.

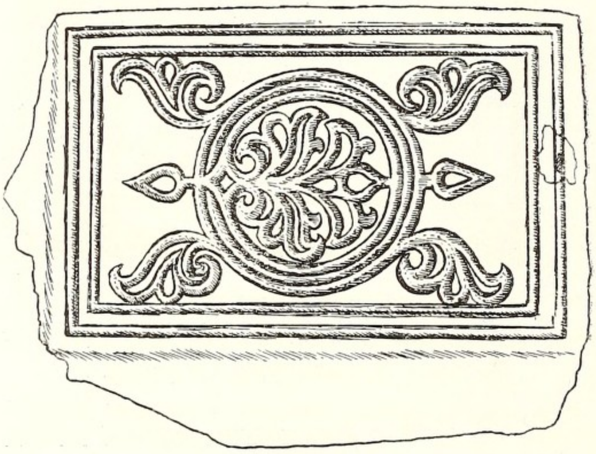

FIG. 18—KAIROUAN BINDING NO. 119a (115 x 176 MM.), ELEVENTH CENTURY

Lower cover only is extant.

small central ornamentations of circular, diamond, or star-shaped contours.

Another deviation from the general plan of decoration is found in a group of nine eleventh-century bindings (Nos. 118 to 126) which show embossed ornamentation. The decorative designs of these bindings, after having been outlined on the wooden boards, were

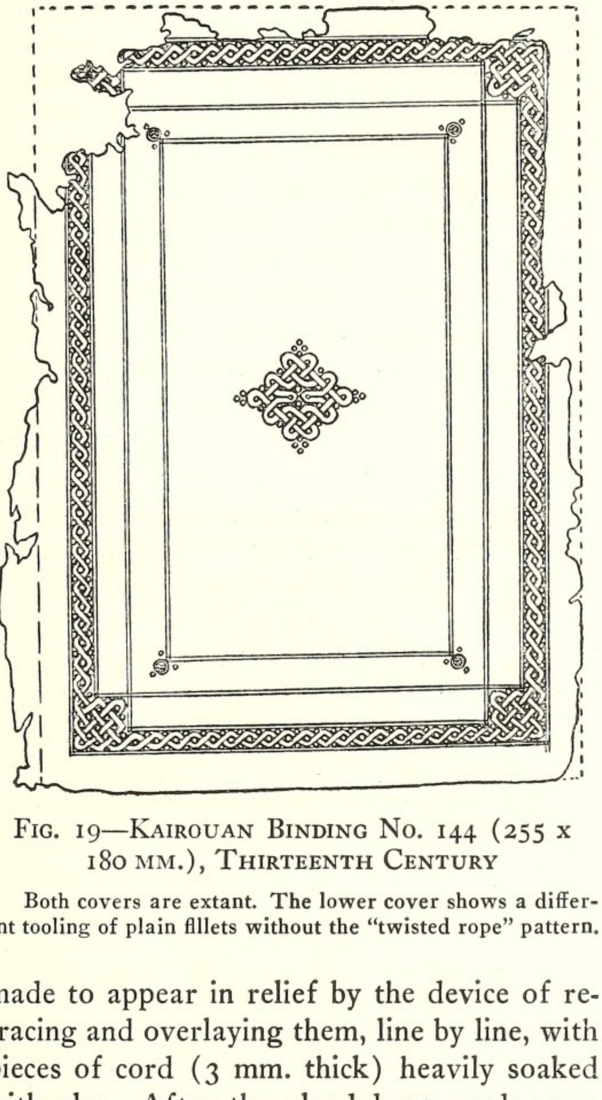

FIG. 19—KAIROUAN BINDING NO. 144 (255 x 180 MM.), THIRTEENTH CENTURY

Both covers are extant. The lower cover shows a different tooling of plain fillets without the "twisted rope" pattern.

made to appear in relief by the device of retracing and overlaying them, line by line, with pieces of cord (3 mm. thick) heavily soaked with glue. After the glued-down cords were sufficiently dried and hardened, the leather covering was glued and firmly pressed over them. Then as the pattern of the underlying cords appeared on the face of the leather as a design of gentle ridges, it was further accentuated by running a tooled line close to either side of the ridges, thereby bringing these into stronger relief.[10]

While in four of these latter bindings (Nos. 123–126) the decoration of the borders was confined to straight lines and that of the centers of the panels to circular lines, binding No. 118 was given a "twisted rope" pattern in its border and a circular shield in its panel. Bindings Nos. 119 to 122 were given palmette designs in the panels (*fig. 18*) and, in addition, Nos. 121 and 122 were given floral ornaments in the corners of the borders.

A further enlivening of the line-tooling was accomplished in the greater portion of the bindings by the free use of stamp impressions placed either singly within the meshes of the "platted band" decorations or used in continuous rows to supply frieze decoration to the borders. (Samples of some of these stamps are shown in fig. 20, A, *a–k,* and most of the stamps were used in identical forms in early Coptic leather bindings.)

In any comparison of the Kairouan bindings with earlier leather bindings of Christian Egypt it should be remembered that prac-

[10] A good-sized specimen of Egyptian leather of the late thirteenth or fourteenth century (perhaps part of a saddle) decorated in this technique, in the collection of R. Ettinghausen, clearly reveals ends of the modeling cords protruding from the embossed design, where the leather has suffered from abrasion. While this type of embossed ornament is not found on any of the early Coptic book covers extant, it was part of the Coptic leatherworker's stock-in-trade. It would be of great interest to know if the famous binding of the seventh-century St. Cuthbert codex at Stonyhurst College, England, which, according to Berthe van Regemorter's description in her article *La reliure des manuscrits de S. Cuthbert et de S. Boniface,* Scriptorium, vol. 3 (1949), p. 46, shows other resemblances to early Coptic bookbinding, also had its embossed ornament executed in a technique familiar to early Coptic leatherworkers and, somewhat later, to the bookbinders of Kairouan.

tically all the 120 or more ancient Coptic bindings available for a comparison were found, not in the ruins of large populous cities such as Kairouan in Tunis, or Alexandria, Memphis, and Cairo in Egypt, where professional scribes and bookbinders would be conversant with the latest trends of artistic book production and eager to excel in inventiveness and quality of workmanship, but in the ruins of

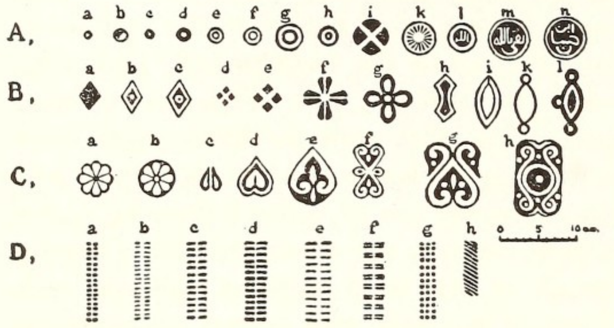

Fig. 20—Decorative Stamps Used by the Kairouan Bookbinders

The inscription بقي بالله: "Duration is to God—God is Eternal," of stamp A *m*, is used on bindings Nos. 75, 113, and 127a. The binder's name ابن حسان, Son of Ḥassān, of stamp A *n*, is used on binding 144 (*fig. 19*). Of the 50 or more "chenille" stampings cited and pictured by Marçais, 8 are given here; and of these D *a* was used in binding No. 41 (*fig. 13*); D *b* in binding No. 54 (*fig. 14*); D *c* in binding No. 1a (*fig. 10*); D *d* in binding No. 72 (*fig. 16*), D *f* in binding No. 28 (*fig. 15*); D *h* in binding No. 98 (*fig. 17*). Marçais holds that the "chenille" stamps had their origin in the Coptic use of narrow strips of parchment which were threaded through rows of closely repeated slits made in the band ornaments of the leather covering, to enliven and emphasize these bands within the scheme of decoration (*figs. 27, 28, 33*).

monasteries along the edge of the deserts of Upper Egypt and the Fayum, where the copying and binding of books was done for the most part within convent walls and where the ornamenting of book covers would consist not so much in the inventing and perfecting of new designs as in the copying of tested older patterns of an established Hellenistic tradition.

The format of early Coptic codices, as well as of early Greek, Latin, and Syriac books, was uniformly vertical—oblong, with only a few exceptions which approach the square form, the Berlin manuscript Or. oct. 987 of the *Proverbs of Solomon*, Achmimic (13 x 14.5 cm.) being one of these.

The basic operations executed by Coptic monastic bookbinders at the time of the Islamic invasion were the same as those that had been used in Egypt certainly since the fourth century. Where multiple-quire codices were to be bound, the written sheets, arranged in gatherings usually of four sheets, were sewn with from two to five stitches, their number depending upon the size of the book. If the book was very small one stitch might suffice. The sewing proceeded lengthwise along the fold of the gathering, and at every thread hole, where the sewing cord was drawn out toward the back of the gathering, it would be linked or chain-stitched tightly to the sewing of the preceding gathering before it was drawn back again to form another stitch inside the fold of either the same or the next gathering (*figs. 3* and *4*), When all the gatherings had been tightly sewn into book form, the chain-stitch linkings would appear as so many braids fastened across the back of the book. When the sewing also was to include the attaching of the covers, the thread would first be laced to the upper cover in the form of a number of hinging loops, to which the book sewing would then be linked. The places of the holes through which the hinging loops were laced were near the back edge of the cover opposite each of the several thread holes made by the sewing of the first gathering. When the sewing of all the gatherings of a book was completed, the thread would then be laced through the series of holes along the hinging edge of the lower cover, but on having been looped through each one of these holes the thread would be tightly linked by a separate stitch to the respective chain-stitch sewing of the adjoining last gathering, thereby hinging the cover to the book.

The use of wooden boards for book covers

by Coptic bookbinders can be documented from the fourth century down to the Middle Ages,[11] although the greater number of the extant early Coptic bindings are seen to be constructed with boards that were built up of waste papyrus material.

After the book was sewn to its covers, a piece of heavy linen was glued over the back of the book, and this linen was made wide enough for the flanges on either side to be glued a width of an inch or more over the hinging edges of the two covers. After this was done, the sewing of the headbands was undertaken. The sewing thread, once it was firmly laced onto the corner of the hinging edge of the upper cover, was made to pass, by short single stitches, from the head of the sewn book into the inner fold of each successive gathering; and when, after each of these stitches, it was returned through the linen-covered back to the head of the book, it was linked or chain-stitched around the chain-stitch mesh protruding from the head of the preceding gathering in such a way that the whole series of chain-stitches, beginning at the hinging edge of the upper cover and terminating at the hinging edge of the lower cover, would form a braid similar to the chain-stitch band formed by the sewing of the gatherings into book form (*fig. 22*). This form of headband lacing, with some inevitable slight modifications in the loopings of the braid and with the occasional use of colored threads, served in early times as the normal headband sewing, though as time went on more elaborate techniques of braiding, with several guide threads serving as warp and two or three sewing threads of different colors serving as weft, were used for more pretentious bindings.[12]

The use of leather for covering the boards of codices can be documented by Coptic bookbindings as far back as the fourth century.[13]

The cutting of the leather coverings to proper size, allowing for the turn-ins on inner margins, and for the caps at head and tail of the back of the books has remained to the present day what it was in Egypt during the early centuries of the Christian era. The

[11] The following early wooden book covers from Egypt can be cited: Those of a fourth-century Manichaean papyrus codex of the *Kephalaia* in Coptic, now in Berlin; those of the fifth-century parchment codex of the *Gospels,* in Greek, with covers bearing the painted figures of the Four Evangelists, now in the Freer Gallery in Washington; the sixth-century parchment codex of the books of *Ecclesiasticus* and *Wisdom of Solomon,* in Coptic, now in Turin; the two sixth-century parchment codices containing (1) the *Epistles of St. Paul,* (2) the *Acts of the Apostles* and *Gospel of St. John,* in Coptic, now in the Chester Beatty Library in Dublin (*fig. 8*); a sixth- or seventh-century codex of *Theological questions and answers,* in Coptic, now in the Phillipps Library in Cheltenham; also four detached covers, perhaps third- or fourth-century, which came to the Chester Beatty Library together with the twelve early *Biblical* papyrus codices, in Greek, discovered in 1930; the large covers with beautifully tooled and stamped leather, which contain a seventh-century Syriac *Biblical* manuscript now in Milan (Ambros. C 313 inf., *fig. 21*), but which at an earlier time, according to the tooled inscription on the two covers, contained the first tome of a manuscript of the *Old and New Testaments,* in Greek. This binding came from the Syrian Monastery in the Wādī al-Naṭrūn, Egypt. The Keep of the chapel of al-ʿAdhrā, in the St. Macarius monastery in the Wādī al-Naṭrūn also preserves a large detached old book cover of acacia wood, lined with untooled black leather, of undetermined age.

[12] P. Adam, *Über türkisch-arabisch-persische Manuskripte und deren Einbände,* Archiv für Buchbinderei, vol. 4 (Jan. 1905), p. 149.

[13] Some of the oldest extant Coptic leather-covered bindings are: The one covering the fourth-century papyrus codex containing *Deuteronomy, Jonah,* and the *Acts of the Apostles* (Brit. Mus. Or. 7594) in plain kidskin, varnished; that which covered the fourth-century papyrus book containing *The first letter of Clement* (Berlin Or. fol. 3065), with tooled decorations; and that which covered the fourth- or fifth-century papyrus book containing *The Martyrdoms of St. Peter and St. Paul* (now in the Moscow Museum of Fine Arts).

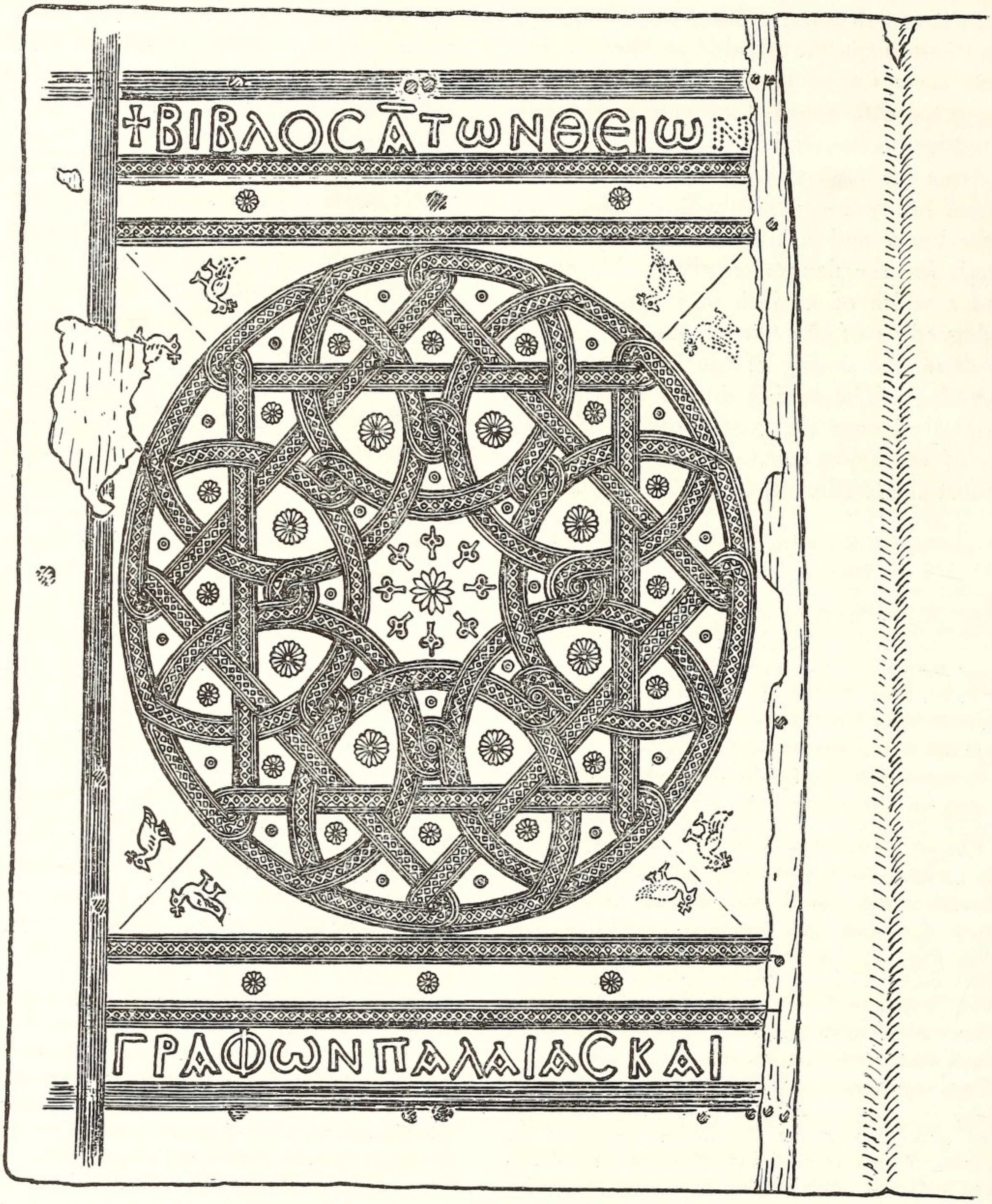

FIG. 21—LOWER COVER OF THE BINDING OF MS. SYR. C 313 FOL. (CA. 340 x 270 MM.), SIXTH-SEVENTH (?) CENTURY. MILAN, AMBROSIAN LIBRARY

gluing-down of the leather covering over the back of the book and over the outer faces and inner margins of the boards has likewise remained the same. The turn-ins on the inner margins were not mitered but cut off at right

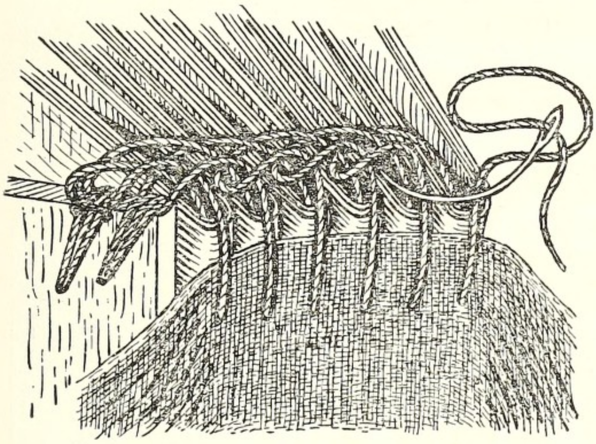

FIG. 22—DRAWING OF THE USUAL PLAIN COPTIC HEADBAND SEWING

When the threads were pulled tight they would appear as shown in the headband of the Ibscher binding (*fig. 6*).

angles at the corners of the board and then glued one over the other, the turn-in along the fore edge being placed uppermost.

In many old Coptic codices extra flyleaves are seen to have been "guarded" around the front of the first and the rear of the last gathering. These were generally unwritten leaves or leaves from which old writing had been washed off, and they were intended to be pasted down on the inner faces of the book covers after the book clasps had finally been rooted in the edges of the covers and the binding had thus been completed.

The earliest method of decorating the leather coverings of books was probably that of blind-tooling and blind-stamping, although the decorating with inked and painted ornament [14] and with cut-out openwork backed with pieces of painted or gilded parchment may also have been tried very early, since these techniques of ornamenting were known in Egypt long before books were bound in codex form.[15]

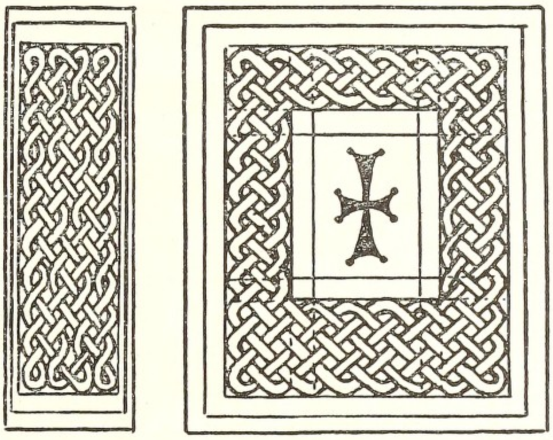

FIG. 23—BINDING OF MS. BEATTY COPTIC C CONTAINING *Psalms 1–50* (105 x 85 MM.) CA. A.D. 600 OR EARLIER

The design is inked on red leather.

Whenever the decorating was to consist of openwork with parchment backing it had to be done before the leather covering, already

[14] Inked ornamenting is found on the red leather bindings of the sixth-century *Psalter* codex, Chester Beatty Coptic C (*fig. 23*) and the eighth-century Greek *Poll-tax Book,* Brit. Mus. Papyrus Inv. 1442 (*fig. 24*). Painted ornamenting is found on the tenth-century binding of MS. Morgan 601 (*fig. 25*), and painted and inked ornamenting on the eighth(?)-century detached binding Berlin P. 1416 (*fig. 26*). The painting of the covers of the Freer *Gospels* was done not on leather coverings but on the wooden boards.

[15] Cf. H. Frauberger, *Antike und frühmittelalterliche Fussbekleidungen aus Achmim-Panopolis,* Düsseldorf, n.d., pls. 7–9, 18, 20–21. The three finest extant specimens of this "openwork" type of Coptic book ornamentation are seen in the binding of the *Gospels,* Morgan MS. (*fig. 27*), and the two detached bindings: Vienna Erzherzog Rainer Inv. No. 34 (*fig. 28*) and Berlin Mus. Papyrus 14018. Two leather coverings, each with a large cut-out in the form of a potented cross backed with parchment, on which a twisted rope pattern in red and yellow colors is painted, are extant in Morgan Coptic binding 670 *bis* (*fig. 29*).

cut to size, was glued to the boards. When the decorating was to be done by tooling and stamping, it likewise had to be done before the leather was glued to the boards, whenever these latter were not wooden boards but boards built up of fragile papyrus material that could not withstand the pressure of tooling and hammering. The tooling was done with unheated irons and on moistened leather, according to the expert judgment of P. Adam and H. Ibscher, who closely examined and described the Coptic bindings in the Berlin Museum. Since the Kairouan bookbinders were using wooden boards, they did their tooling and stamping only after the coverings had been glued in place. The imprint of their stamping can still be seen in places where the leather has been torn from the boards.

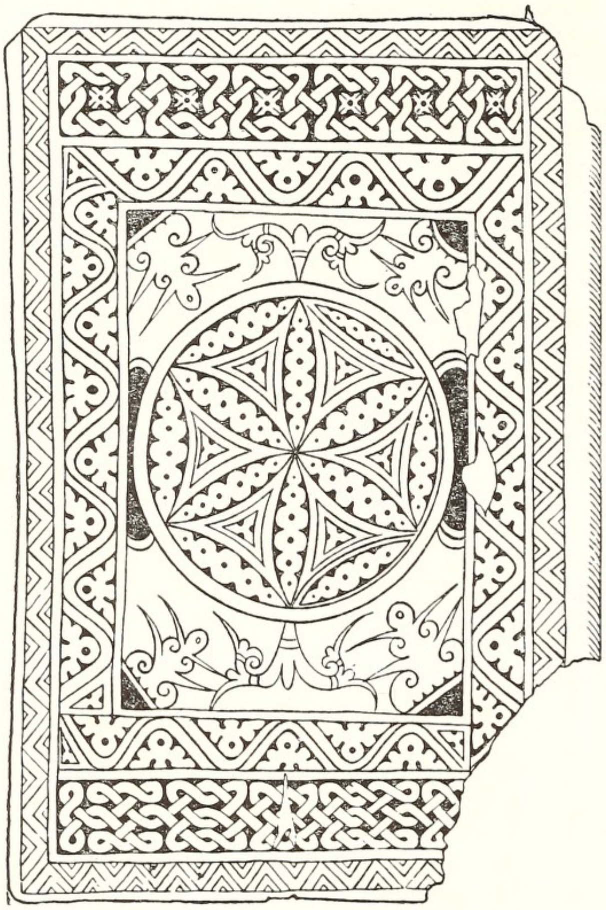

FIG. 24—BINDING, BRIT. MUS. INV. NO. 1442, OF A PAPYRUS *Poll-Tax Book,* GREEK, FROM APHRODITO, EGYPT (340 x 295 MM.), FIRST HALF OF EIGHTH CENTURY

The design is inked on reddish leather. There is also a fore-edge flap 7 cm. wide.

The last important step in the bookbinding process was that of providing clasps which would hold the book firmly together when it was closed. Some of the earlier Coptic books were provided with leather thongs long enough to be tied around the books.[16]

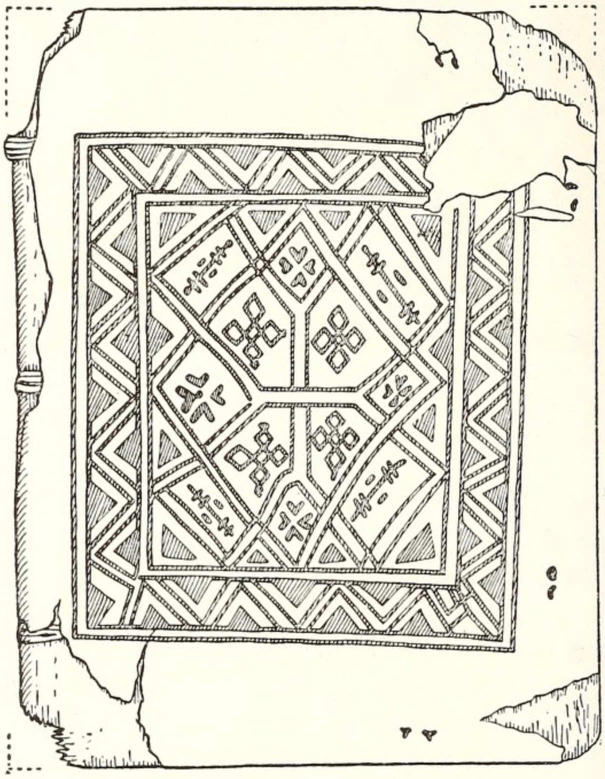

FIG. 25—BINDING OF MS. MORGAN 601, *Catholic Epistles,* COPTIC (330 x 260 MM.), NINTH TO TENTH CENTURY

The design is crudely painted with yellow on brown leather.

[16] Eleven Gnostic third- and fourth-century papyrus books, found in 1946 at the site of ancient Chenoboskion in Upper Egypt (now in the Coptic Museum in Cairo), are bound in flexible leather covers and

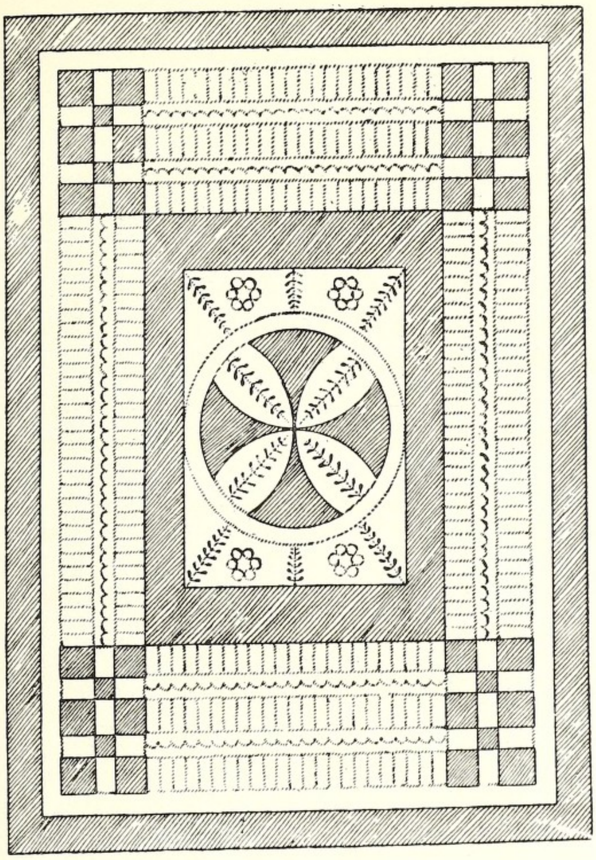

Fig. 26—Reconstruction by Hugo Ibscher of a Fragmentary Coptic Binding, Berlin Mus. P. 14016 (ca. 310 x 225 mm.), Eighth to Tenth Century

The design is painted or inked in black on reddish-brown leather.

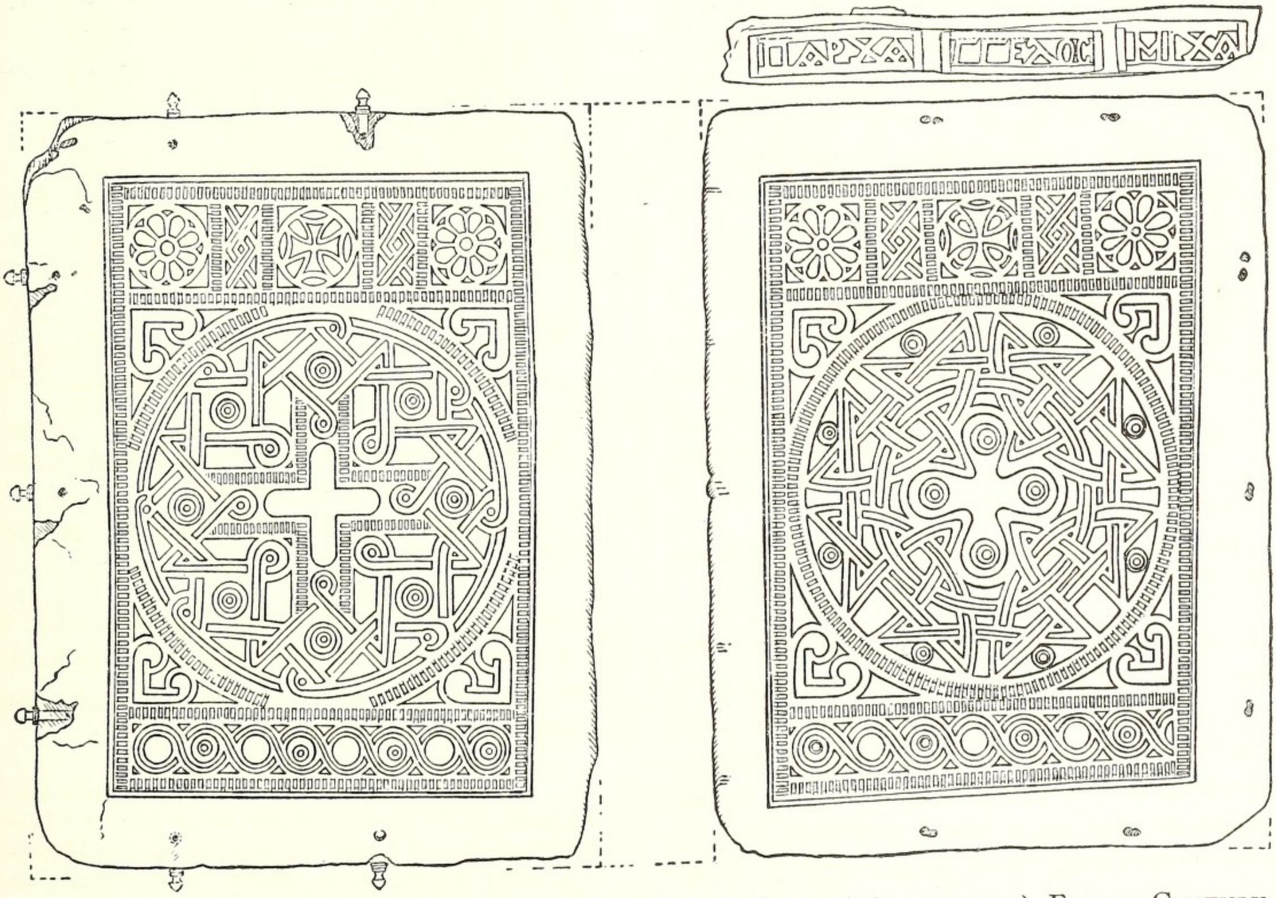

Fig. 27—Binding of MS. Morgan 569, *The Four Gospels,* Coptic (385 x 295 mm.), Eighth Century

The decoration is of openwork in red leather, over a gilt parchment base. The framework of the design is made by threading narrow ribbons of parchment through rows of closely cut slits, thus producing lanes of alternating patches of red leather and white parchment.

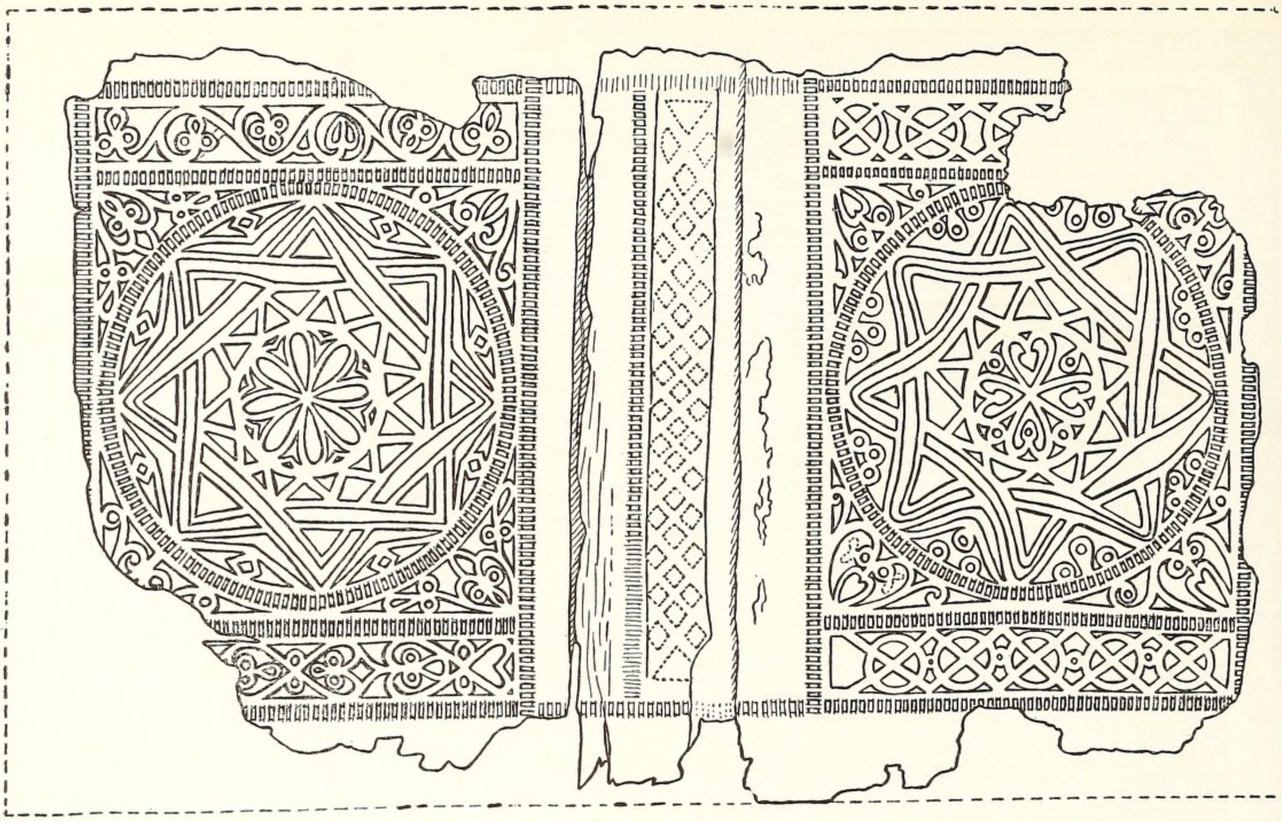

Fig. 28—Detached Binding, Vienna Inv. No. 34 (370 x 270 mm.), from Arsinoe in the Fayum, Seventh (?) Century. The Decoration is the Same in its Technique as MS. Morgan 569

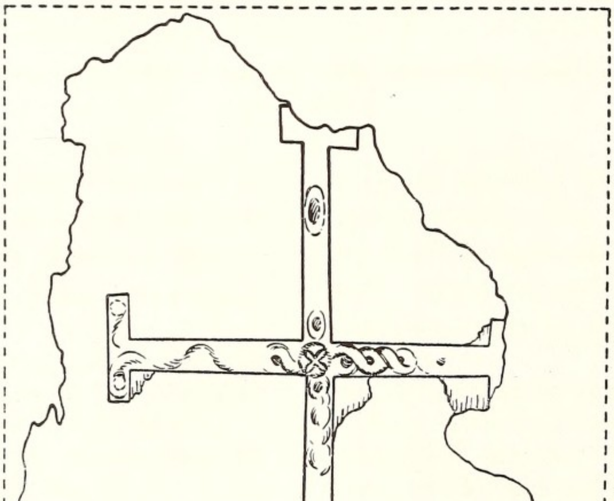

Fig. 29—Detached Binding with a Potented Cross Cut out of Reddish-brown Leather and Underlaid with Painted Parchment. Morgan 670 bis [4] (320 x 225 mm.), Ninth Century

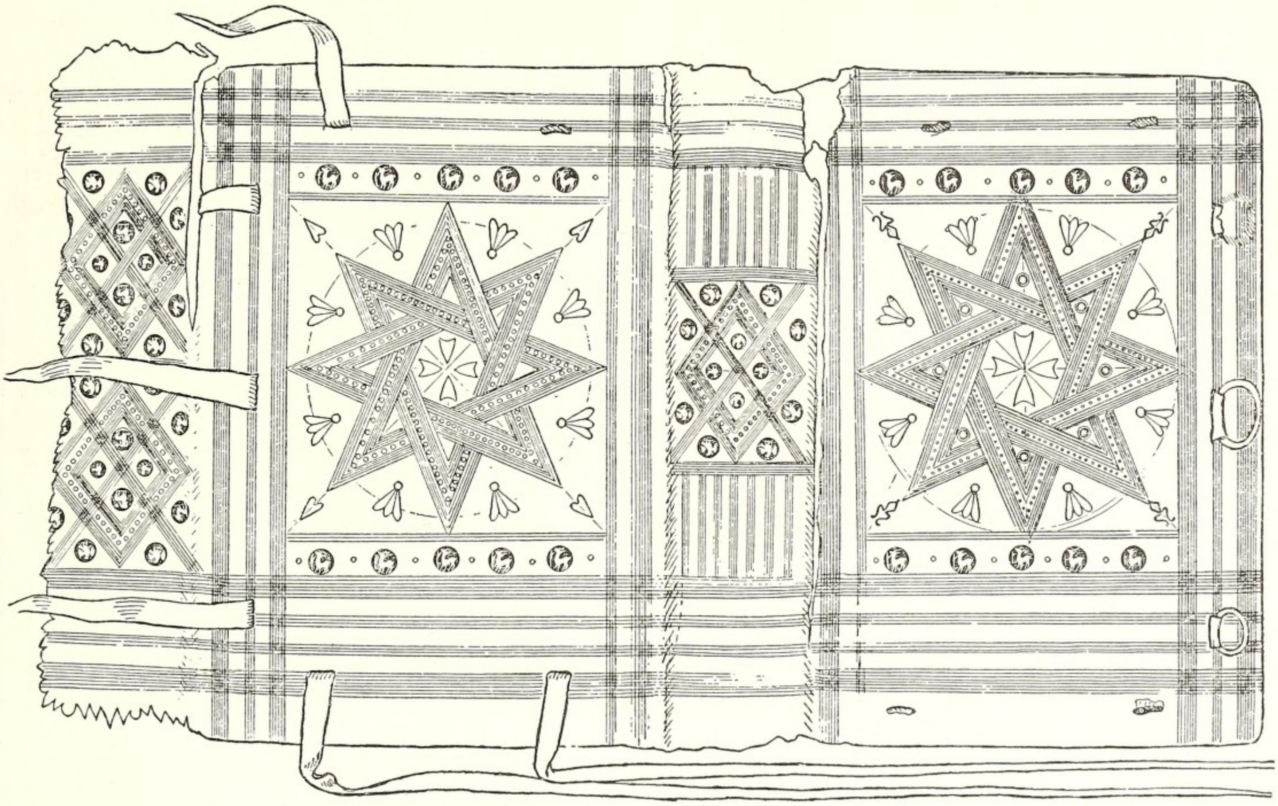

FIG. 30—BINDING OF MS. BRIT. MUS. OR. 5000, *Psalter* COPTIC (298 x 215 MM.), SIXTH-SEVENTH CENTURY

But most extant Coptic bindings are seen to have been furnished with clasps which, reaching only across the fore edge of the book, hook the front cover to the rear cover. The standard form of this type of clasp consisted of a loop of braided thong which was rooted near the edge of the upper cover and was long enough to reach the lower cover and to be slipped over the head of a metal or bone peg

have long, narrow leather straps fastened to the pentagonal flaps which extend from the fore edge of their lower covers. Some of these books had similar long straps fastened also near the top edge of the lower covers. The straps were provided for the purpose of having them tied vertically and horizontally around the books when the latter were not in use. Similar thongs are to be seen on the elaborately decorated binding of a large sixth- or seventh-century papyrus book of the *Psalter* in Coptic (Brit. Mus. Or. 5000) (*fig. 30*). This binding also has a flap extending from the lower cover. The straps fastened along the fore edge of the lower cover are three in number, while two straps are placed along both the head and tail edges of the same cover. Metal rings, into which these straps could be tied, are provided in the respective places near the edges of the upper cover.

A wider type of wrapping bands was provided for the sixth-century Chester Beatty Coptic Codices A and B (*fig. 8*) and also for the painted covers of the fifth- or sixth-century Freer *Gospels*. These bands had their attached ends slit for a short distance into a series of parallel thongs which then had been spread apart to be rooted and glued into a series of holes made in the fore edge and top edge of the upper cover. The extant portions of the bands which belong to the Beatty Coptic codices show that each of the bands was long enough to be wrapped twice around the binding and that the bone slips attached to the free ends of the bands served to pull the bands tight and to fasten them.

that was rooted and riveted in the edge of the lower cover.[17]

Another form of Coptic clasp consisted of plain, single leather thongs fastened in the upper cover and terminating at their free ends in knotted knobs which, reaching over the edge of the lower cover, could be buttoned into short clasp loops or "eyes" made of leather and fastened in the lower cover about an inch away from its edge.[18]

It is more than likely that at the time when Islam came to power the above-mentioned basic operations of the bookbinding technique of Coptic Egypt were being used throughout the Greco-Roman world and the provinces of the Near East. It would seem almost

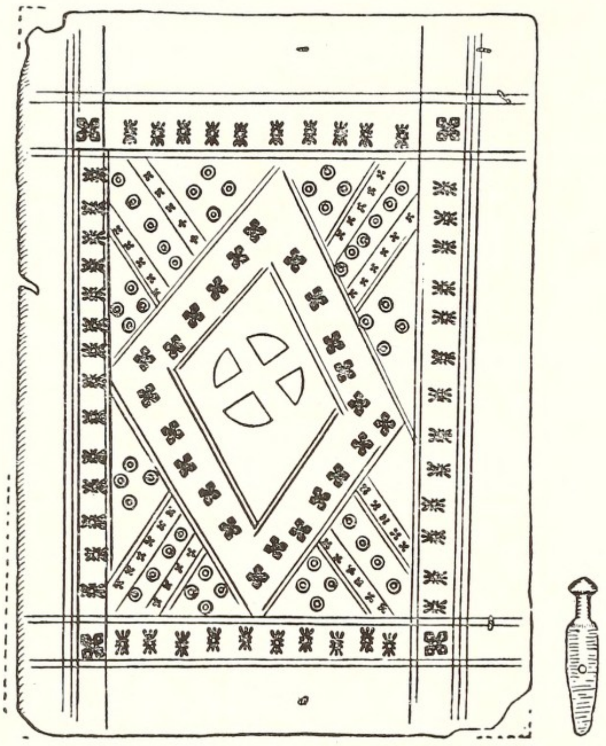

FIG. 31—BINDING OF MS. BRIT. MUS. OR. 6801, *Lectionary* FOR THE FEAST OF ST. MERCURIUS, COPTIC (279 x 215 MM.), ABOUT A.D. 1000

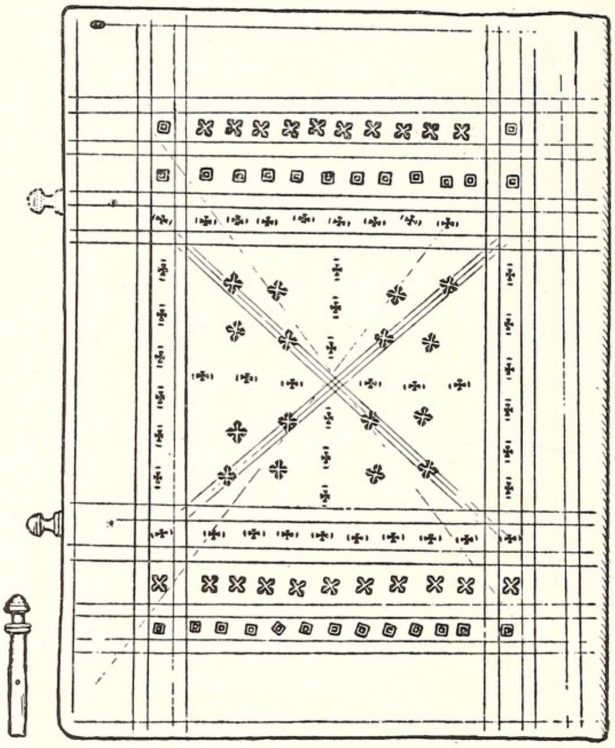

FIG. 32—BINDING OF MS. BRIT. MUS. OR. 7597, *Lectionary*, COPTIC (292 x 222 MM.), SECOND HALF OF TENTH CENTURY

[17] In the binding of the large *Gospel* codex, MS. Morgan 569 (*fig. 27*), seven clasps with seven bronze pegs were provided. The binding of the book of *The martyrdom of St. Mercurius*, Brit. Mus. Or. 6801, was fitted with four clasps and four iron pegs (*fig. 31*). The binding of a book of *Discourses*, Brit. Mus. Or. 7597 (*fig. 32*) was fitted with two clasps and two bone pegs, and at least nine of the ninth-century Coptic codices of the Pierpont Morgan Library were fitted with four or five clasps and four or five bone pegs.

[18] Four clasps of this form were used in the fifth(?)-century Leyden codex, Anastasy 9 (*fig. 33*). From four to seven of these clasps were used in fifteen or more of the ninth-century Coptic bindings in the Pierpont Morgan Library, also in several of the ninth- and tenth-century Coptic bindings preserved in the British Museum, London, and the Coptic Museum, Cairo. The small thirteenth-century Bohairic *Prayer book*, Morgan 671(1) had only one such clasp (*fig. 34*). This form of clasp has been used in Coptic bindings down to the past century (*fig. 35*).

inevitable, therefore, that the Islamic conquerors, insofar as they were not already acquainted with classical and Hellenistic methods of bookbinding, should speedily have learned of them and adopted them for their own use. There would likewise be little doubt that the Islamic invaders, on having become experienced masters in their own right, would remember their native patrimony of artistic resources and begin to modify and change to their own taste and fancy much of what they took and used out of the abundance of their newly gained Hellenistic, Coptic, and Sasanian heritage.

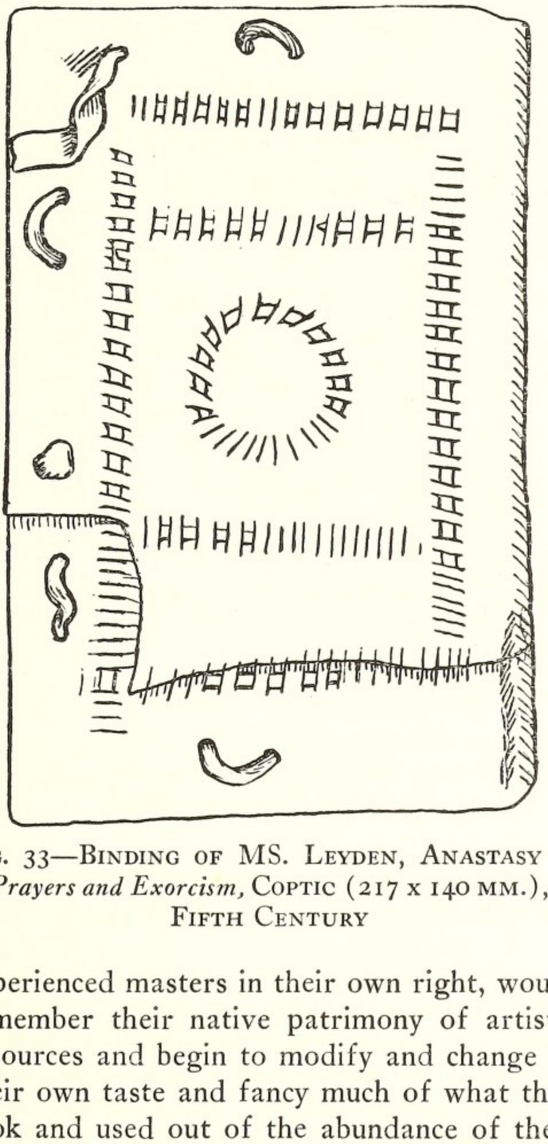

FIG. 33—BINDING OF MS. LEYDEN, ANASTASY 9, *Prayers and Exorcism,* COPTIC (217 x 140 MM.), FIFTH CENTURY

They retained their fine, flowing Arabic script and their way of writing from right to left throughout the book and across each page. But when they had begun to use their writing as a feature of architectural decoration and had fashioned it into the monumental forms of the Kufic script, they began to use this latter script also in the copying of their Korans and thereupon to change the traditional format of their books to a more suitable horizontal oblong. For this change they had no Western precedent. Nor does it seem likely that they imitated the palm-leaf form of book which was used in India, and in Persia to some extent by the Manichaeans. The change was original with the Islamic artists.[19]

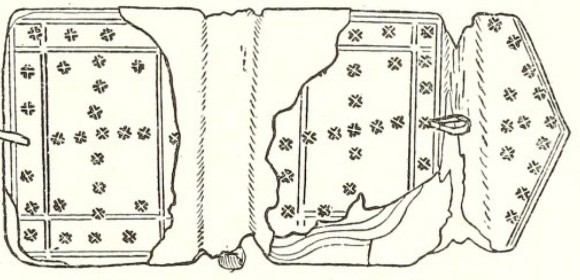

FIG. 34—BINDING OF MS. MORGAN 671 (1), COPTIC *Prayer Book* (105 x 80 MM.), THIRTEENTH (?) CENTURY

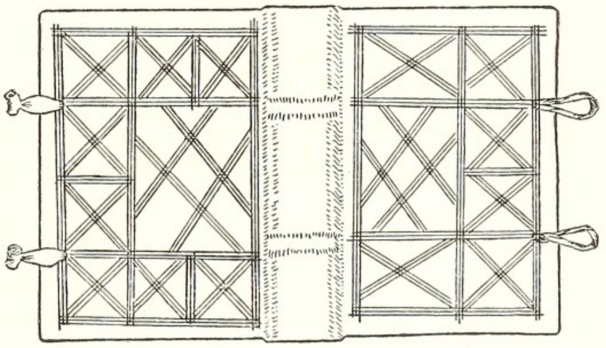

FIG. 35—BINDING OF A COPTIC *Prayer Book* (168 x 120 MM.), EIGHTEENTH CENTURY

[19] R. Ettinghausen suggested that "since many of the manuscript decorations in the Kufic Qur'ans have a definite architectural character, such as arcades and patterns which seem to copy mosaic pavements, it is perhaps justifiable to assume that these Qur'ans [of the horizontal oblong format] may have imitated the horizontal Qur'anic inscription panels in the mosques

In designing their tooled ornamentations the Islamic bookbinders proved themselves likewise to be masters and not mere copyists. They turned away from the Coptic and Greco-Roman tradition of preferably drawing square central panels with geometrical ornament and narrow frieze panels above and below these (*figs. 36–38*).[20] They cultivated instead the plan of single oblong panels filled with twisted, platted, and intertwined, all-over band ornament, and they freely used twisted-rope patterns also on the borders (*figs. 10–14*). In this also they were most likely innovators, for there are no early Coptic book covers in existence that show similarly tooled ornament

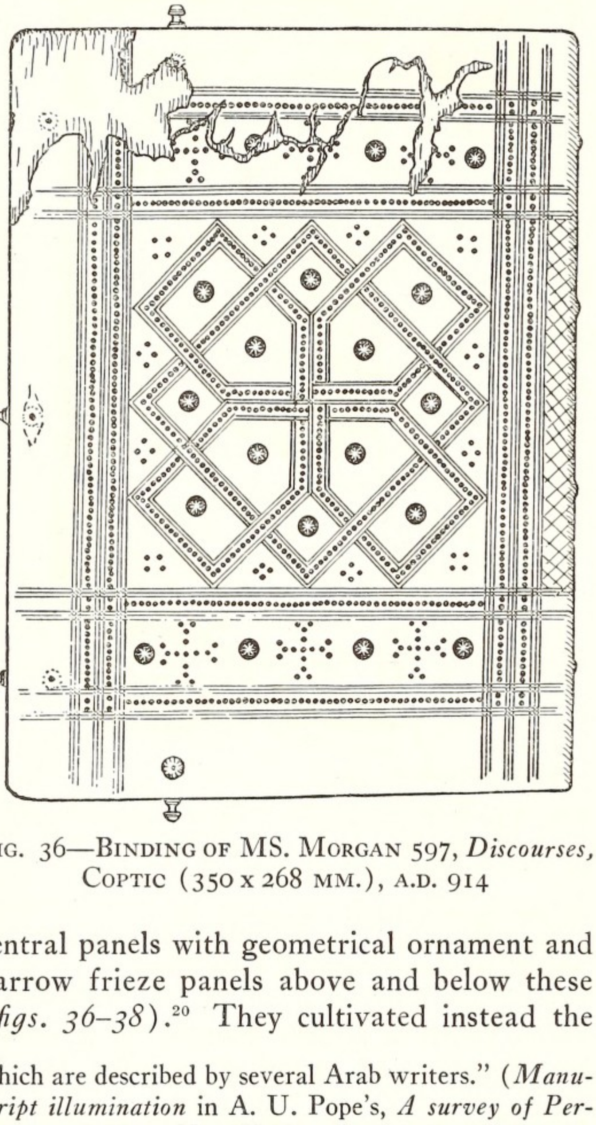

FIG. 36—BINDING OF MS. MORGAN 597, *Discourses*, COPTIC (350 x 268 MM.), A.D. 914

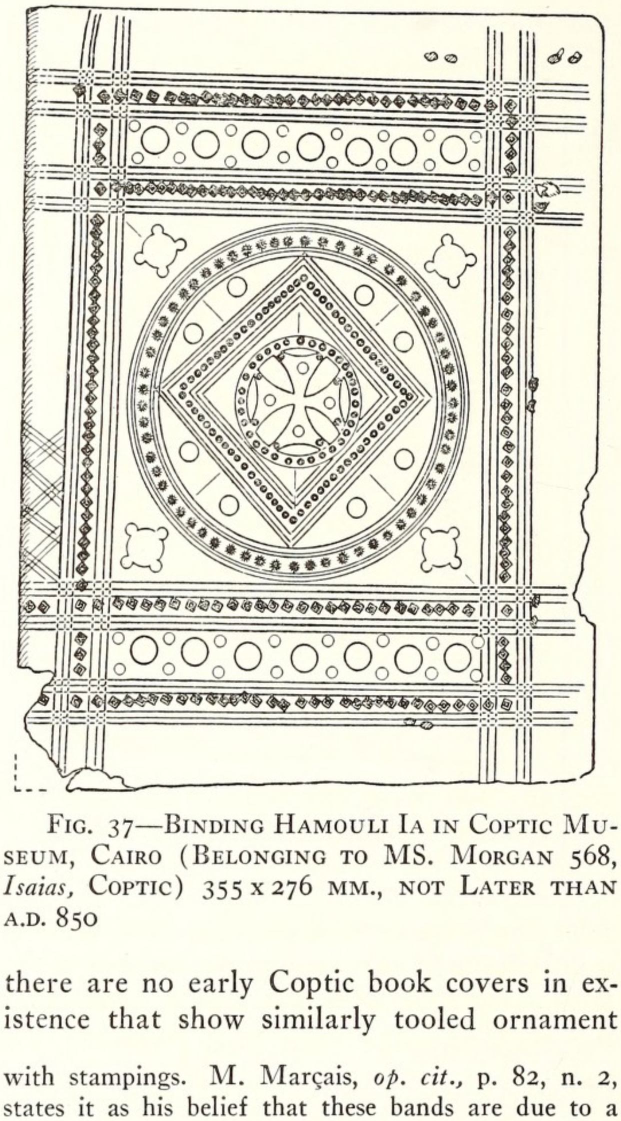

FIG. 37—BINDING HAMOULI IA IN COPTIC MUSEUM, CAIRO (BELONGING TO MS. MORGAN 568, *Isaias*, COPTIC) 355 x 276 MM., NOT LATER THAN A.D. 850

which are described by several Arab writers." (*Manuscript illumination* in A. U. Pope's, *A survey of Persian art*, London-New York, vol. 3, p. 1942.)

[20] There are at least two Kairouan bindings, Nos. 64 and 65, which show square central panels with the rosette or star decorations found so commonly in Coptic bindings; and there are at least three other bindings, Nos. 14, 15, and 28, in each of which an oblong central panel is flanked at either short end, inside the decorative border, not by the customary Coptic frieze panels but by narrow bands ornamented with stampings. M. Marçais, *op. cit.*, p. 82, n. 2, states it as his belief that these bands are due to a faulty composition of the panel decoration. A look, however, at binding No. 14 (*fig. 11*) should make it clear that by omitting the two narrow flanking bands the bookbinder would have been able to complete his intertwined panel design so as to make it symmetrical. May it not be that the binder in introducing the narrow flanking bands sought to retain something of the esthetic effect which he felt to have its source in the traditional Coptic panel arrangement?

from which the Kairouan patterns could have been copied. If it should be true that the bookbinders of Lower Egypt used such patterns at the time of the Islamic conquest, it is regret-

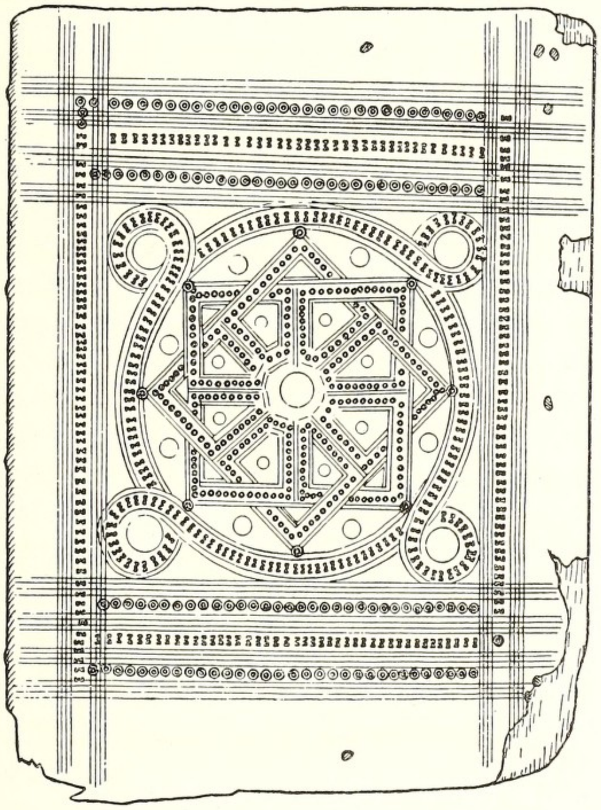

FIG. 38—BINDING OF MS. MORGAN 590, *Lectionary* FOR THE FEAST OF ST. MENAS, COPTIC (352 x 269 MM.), A.D. 893

table that none of their bindings (and for that matter none of the manuscripts written in the Bohairic dialect of Lower Egypt, older than the ninth century) have been preserved for us.[21]

It is true that some of the ornamental title frames and decorative headpieces and tail-

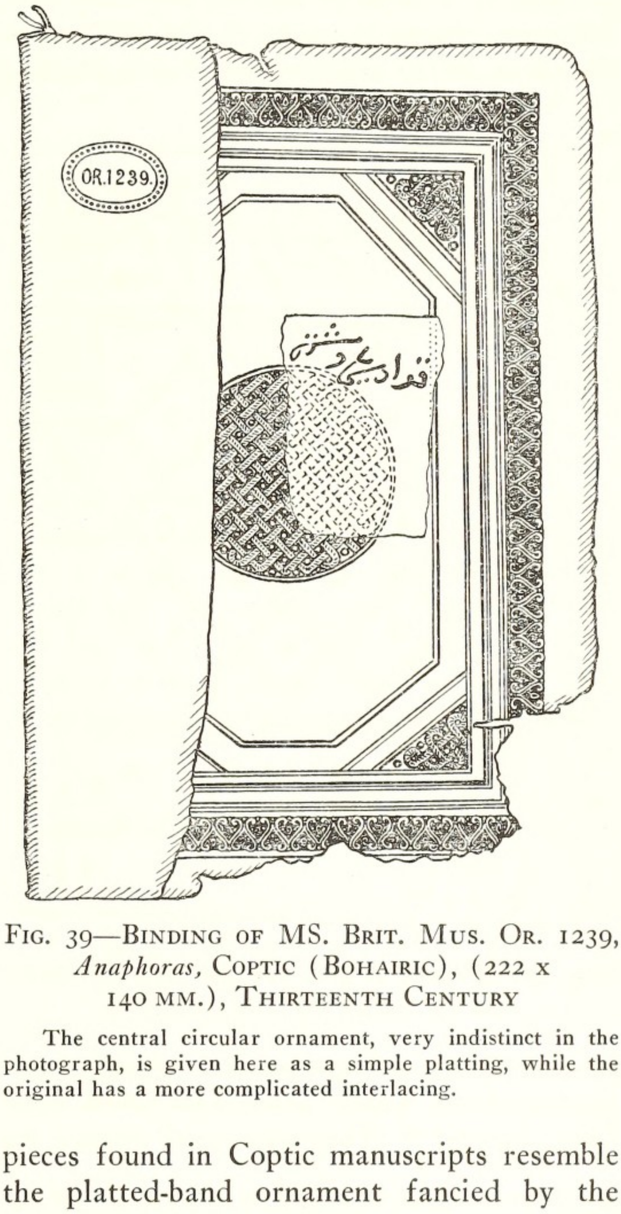

FIG. 39—BINDING OF MS. BRIT. MUS. OR. 1239, *Anaphoras,* COPTIC (BOHAIRIC), (222 x 140 MM.), THIRTEENTH CENTURY

The central circular ornament, very indistinct in the photograph, is given here as a simple platting, while the original has a more complicated interlacing.

pieces found in Coptic manuscripts resemble the platted-band ornament fancied by the

[21] Here it should be noted that possible future discoveries, like those made at Kairouan, may throw further light upon the early bookbinders' art in Lower (Northern) Egypt. The vaulted hall of the tower of the Syrian Monastery in the Wādī al-Naṭrūn was reported to contain many early elaborately tooled torn-off book covers; but while all the loose manuscript leaves found with them were salvaged and their texts published, the bookbindings were left to their fate and no description of them was given other than to suggest that they resembled the bindings figured in Budge's *Miscellaneous Coptic texts,* London, 1915, and that they could once have belonged to the early Syriac manuscripts which during the eighteenth and nineteenth centuries were taken to the Vatican and the British Museum. Cf. Hugh G. Evelyn White, *The monasteries of the Wadi n'Natrun,* Part I, New York, 1926, p. XLVII, note 4.

bookbinders of Kairouan. It is true also that extant Bohairic book covers of the later Middle Ages (*fig. 39*) resemble those made by Islamic bookbinders of their time, and it is true that even in older bookbindings from Central Egypt (as in that of the sixth- to seventh-century manuscript, Chester Beatty Coptic C, and that of the early eighth-century manuscript, Brit. Mus. Inv. No. 1442 (*figs. 23* and *24*), platted-band decorations inked upon the leather coverings suggest a relationship to the patterns of the Kairouan bookbinders. An equally close relationship, however, can easily be discovered also in the interlaced-band ornament of the carved panels of the teakwood minbar which was made for the Mosque of Kairouan at Baghdad in 863, on orders of the Aghlabid Emir Abū Ibrāhīm. From whatever source the inspirations may have come, it was most likely the calligrapher and the illuminator of manuscripts who seized and recorded the inspirations and furnished a draft of them to the binder for his tooled ornamentation of the book covers.

It has been said that "the art of the book is the basis of all oriental art. The illuminators of manuscripts exercised their skill in many other realms of artistic production, just as in Italy during the Renaissance and it was they, the illuminators, who furnished the plans for most of the creations of oriental art." [22]

[22] F. R. Martin, *Miniaturen und Buchkunst,* Die Ausstellung von Meisterwerken Muhammedanischer Kunst in München 1910, ed. by F. Sarre and F. R. Martin, München, 1912, vol. 1, p. III.

Not all the Kairouan bindings demanded the intervention of artists. None of them compare in excellence of workmanship and general sumptuousness with the magnificent books produced in the Islamic East during the Mamluk period, but they are invaluable in showing the continuity of technical knowledge and proficiency in the bookbinders' craft as they were handed down from the Greco-Roman-Coptic world to the Islamic world.

Early Islamic bookbinding in Kairouan in nearly all its technical particulars resembled Coptic bookbinding of the eighth and ninth centuries. Where it deviated from the Coptic technical tradition, as in the choice of a horizontal format (which deviation was not so much that of the bookbinders as of the calligraphers) and in the adoption of the boxed-in type of bookbinding described by Messrs. Marçais and Poinssot (*fig. 5, c*), it made eventual amends by abandoning these innovations again in favor of the formats of the older tradition. But where the Islamic binders deviated from the traditional Coptic patterns of book-cover decoration and chose to replace these with weavings of their own taste and fancy, they had struck out on a new path and a new adventure which, though at first it led them only a few steps away from the Coptic heritage, was eventually to lead them to heights of inventiveness, elegance, and sumptuousness which has never been excelled before or after by anything in "bookbinding art" the world has ever seen.